## AMENDMENT

**Amendments to the Specification:**

Following the abstract, please insert the attached Sequence Listing with subsequent page numbering thereafter.

Please replace paragraph [0106] with the following amended paragraph:

**[0106]** **FIG. 5** to **FIG. 10** illustrates an exemplary method for covering a surface with a template such as covering a cantilever with an oligonucleotide template. **FIG. 5** illustrates the use of a thiol-modified oligo (SH-1-f) [ThiSS}ACAACAACCATCGCCC-TAMRA) (SEQ ID NO:1) that may be bound to a coated surface for example a metal such as a gold thin film layered on a cantilever. TAMRA 501 is just one example of a fluorescent tag that may be attached to an oligonucleotide for detection. The distribution of the thiol-modified oligo may be determined prior to the use of the template for example for sequencing a DNA molecule. The gold substrate may be prepared by using a metallic sputterer at SNF (Ti 50A,Au 1000A on silicon). **FIG.6** illustrates one method for determining the surface coverage by a molecule using a bulky group modified template molecule (eg.TAMRA modified oligonucleotide, 16-mer 05). The surface 601 represents a gold-coated surface (eg. cantilever). Then a template such as an oligo with a bulky group (eg. TAMRA 501) may be attached to the coated surface. The bulky group (eg. TAMRA 501, a fluorescent dye that can be incorporated at the end of the DNA strands) 602 is displaced for example by a hydroxide using for example β-mercaptoethanol 603 in a buffer solution and then the film may be removed 604 and the fluorescence measured by a fluorescent spectrophotometer (**FIG. 6**). In **FIG. 7**, the fluorescence of the released molecules of a modified surface may be measured at several concentrations and as illustrated here at different dilutions. The concentration of molecules per surface area can be determined using a calibration curve as in **FIG. 8** using known fluorescent molecule concentrations. TAMRA is just one example of a fluorescent tag. A number of fluorescent labels are available that can be used for labeling both DNA strands and other biomolecules such as proteins and peptides.

Please replace paragraph [0111] with the following amended paragraph:

**[0111]** **FIG. 9** illustrates a procedure for finding the hybridization efficiency of a target oligo (SEQ ID NO:2) when it binds to the probe oligo (SEQ ID NO:1). A surface 901 may be functionalized with an oligo probe 902. The functionalized surface may then be hybridized with fluorescently labeled target molecules such as DNA 903. The non-hybridized molecules may then be washed away 904. The remaining double-stranded molecule may then be treated with a denaturant such as sodium hydroxide at basic pH to release the fluorescent-labelled molecule for detection 905. This would indicate the hybridizaion efficiency of a target molecule.